

U.S. Application Serial No. 10/682,496
Reply to Notice of
Non-Compliant Amendment dated February 10, 2006

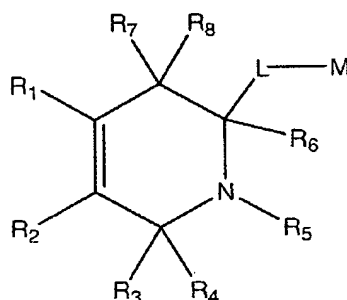
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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1 (withdrawn). A compound comprising the formula:



wherein

R₁ and R₂ are taken together to form a substituted or unsubstituted aromatic ring;

R₃ and R₄ are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group or where R₃ and R₄ are taken together to form a ring;

R₅ is selected from a group of substituents that comprise a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R₆ is selected from a group of substituents that comprise a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R₇ and R₈ are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio,

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acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or R_7 and R_8 are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring;

M is a substituent capable of complexing with a protein metal ion; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

2 (withdrawn). A compound according to claim 1, wherein R_1 and R_2 are selected such that the substituted or unsubstituted aromatic ring formed when R_1 and R_2 are taken together is a substituted or unsubstituted aryl ring.

3 (withdrawn). A compound according to claim 1, wherein R_1 and R_2 are selected such that an aryl ring is formed that is substituted and comprises one or more substituents that together form a ring fused to the aryl ring.

4 (withdrawn). A compound according to claim 1, wherein R_1 and R_2 are selected such that an aryl ring is formed that is a substituted or unsubstituted phenyl ring.

5 (withdrawn). A compound according to claim 4, wherein R_1 and R_2 are selected such that the phenyl ring is substituted and comprises one or more substituents that together form a ring fused to the phenyl ring.

6 (withdrawn). A compound according to claim 1, wherein R_1 and R_2 are selected such that an aryl ring is formed that is a substituted or unsubstituted heteroaryl ring.

7 (withdrawn). A compound according to claim 1, wherein R_1 and R_2 are selected such that a substituted or unsubstituted heteroaryl ring is formed that is selected from the group of substituted or unsubstituted heteroaryl rings consisting of furan, thiofuran, pyrrole, pyrazole, imidazole, triazole, isoxazole, oxazole, thiazole, isothiazole, pyridine, pyridazine, pyrimidine,

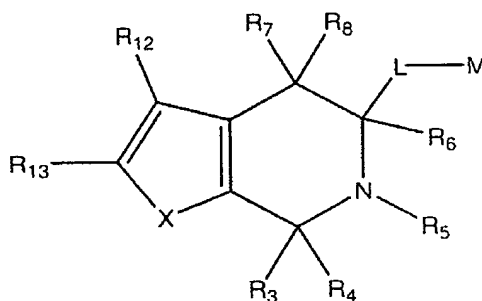
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pyrazine, benzofuran, benzothiofuran, indole, quinoline, isoquinoline, cinnoline, naphthyridine, and pyridopyridine.

8 (withdrawn). A compound according to claim 1, wherein R_1 and R_2 are selected such that a substituted or unsubstituted fused heteroaryl ring is formed

9 (withdrawn). A compound comprising the formula



wherein

R_3 and R_4 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group or where R_3 and R_4 are taken together to form a ring;

R_5 is selected from a group of substituents that comprise a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_6 is selected from a group of substituents that comprise a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_7 and R_8 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio,

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acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or R_7 and R_8 are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring;

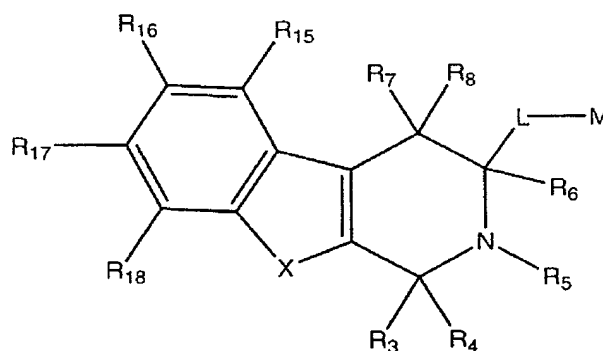
R_{12} and R_{13} are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or R_7 and R_8 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

X is selected from the group consisting of O, S, and NR_{14} , where R_{14} comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, hydroxyl, alkyl, aromatic ring, alkoxy, aryloxy, a carbonyl group, a thiocarbonyl group, and a sulfonyl group;

M is a substituent capable of complexing with a protein metal ion; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

10 (presently amended). A compound comprising the formula:



wherein

R_3 and R_4 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl,

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aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group, or where R_3 and R_4 are taken together to form a ring, in each case unsubstituted or further substituted through available valencies;

R_5 is ~~and R_6 are each independently~~ selected from a group of substituents ~~that comprise comprising~~ a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group, or where R_5 and R_6 are taken together to form a 3, 4, 5, 6, 7 or 8 membered ring, in each case unsubstituted or further substituted through available valencies;

~~R_6 is selected from a group of substituents that comprise a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;~~

R_7 and R_8 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or where R_7 and R_8 are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring, or where R_6 and R_7 are taken together to form a 3, 4, 5, 6, 7 or 8 membered ring, in each case unsubstituted or further substituted through available valencies;

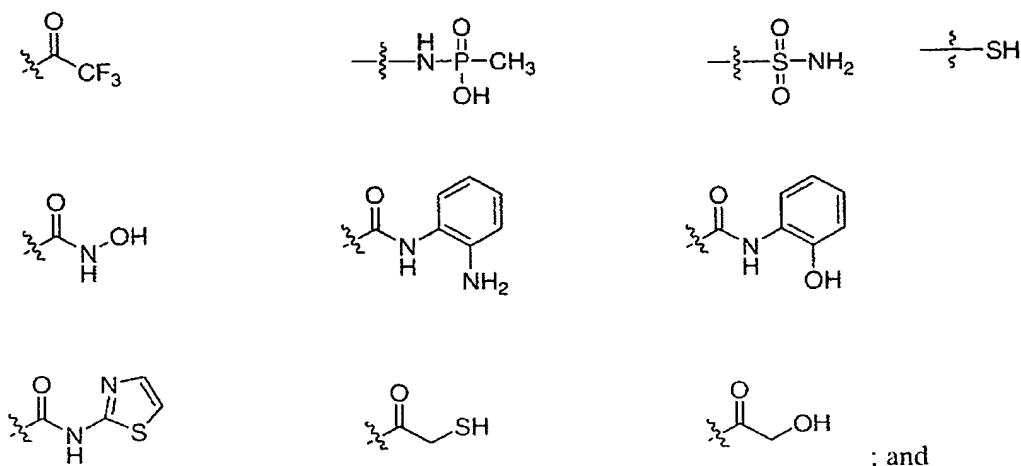
R_{15} , R_{16} , R_{17} and R_{18} are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, except where R_{15} and R_{16} , R_{16} and R_{17} , and/or R_{17} and R_{18} are taken together to form a ~~substituted or unsubstituted~~ 3, 4, 5, 6, 7 or 8 membered ring, in each case unsubstituted or further substituted through available valencies;

X is selected from the group consisting of O, S, and NR_{14} , where R_{14} comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, hydroxyl, alkyl, aromatic ring, alkoxy, aryloxy, a carbonyl group, a thiocarbonyl group, and a sulfonyl group, in each case unsubstituted or further substituted through available valencies;

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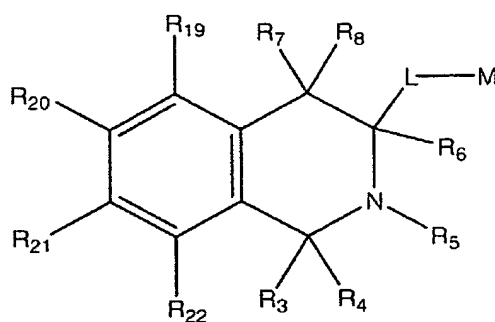
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M is a ~~substituent capable of complexing with a protein metal ion~~ selected from the group consisting of:



L is a ~~substituent comprising~~ a substituted or unsubstituted chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

11 (withdrawn). A compound comprising the formula:



wherein

R_3 and R_4 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl,

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aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group or where R_3 and R_4 are taken together to form a ring;

R_5 is selected from a group of substituents that comprise a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_6 is selected from a group of substituents that comprise a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_7 and R_8 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or R_7 and R_8 are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring;

R_{19} , R_{20} , R_{21} and R_{22} are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, except where R_{19} and R_{20} , R_{20} and R_{21} , and/or R_{21} and R_{22} are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

X is selected from the group consisting of O, S, and NR_{14} , where R_{14} comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, hydroxyl, alkyl, aromatic ring, alkoxy, aryloxy, a carbonyl group, a thiocarbonyl group, and a sulfonyl group;

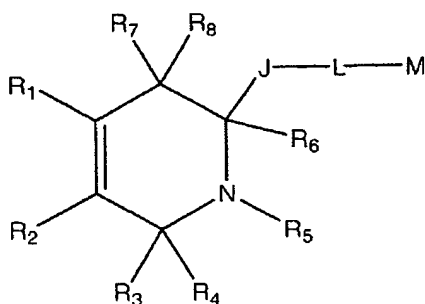
M is a substituent capable of complexing with a protein metal ion; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

12 (withdrawn). A compound comprising the formula:

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wherein

R₁ and R₂ are taken together to form a substituted or unsubstituted aromatic ring;

R₃ and R₄ are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group or where R₃ and R₄ are taken together to form a ring;

R₅ is selected from a group of substituents that comprise a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R₆ is selected from a group of substituents that comprise a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

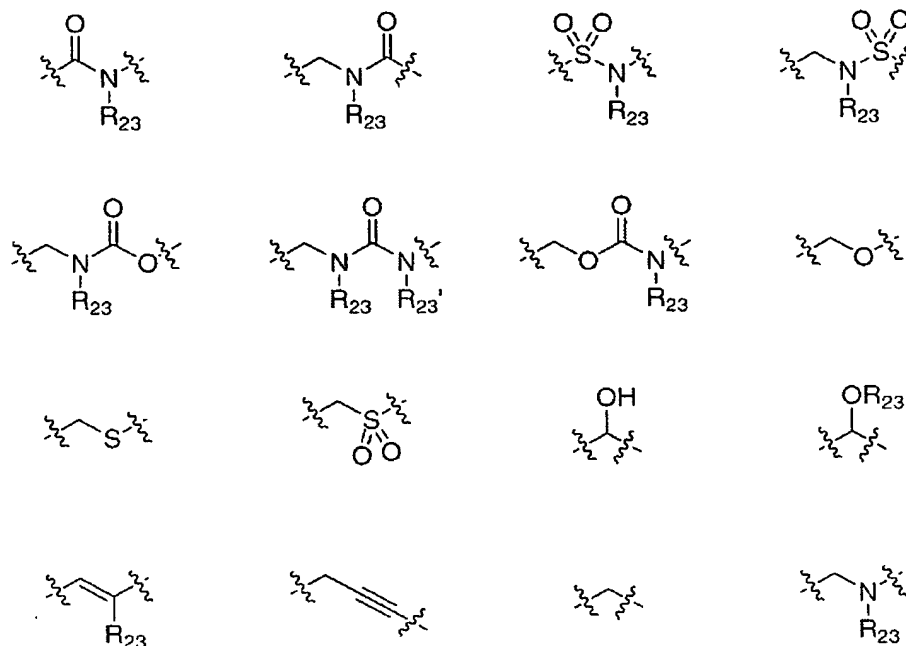
R₇ and R₈ are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or R₇ and R₈ are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring;

M is a substituent capable of complexing with a protein metal ion;

J is selected from the group consisting of

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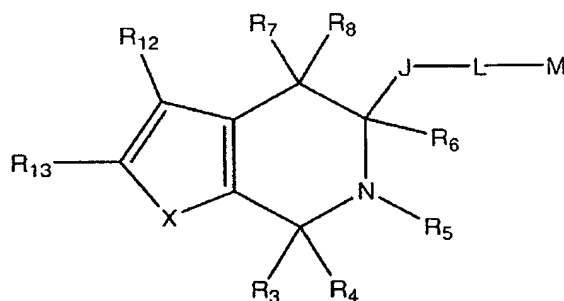
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where R_{23} is a C_{1-10} alkyl; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the J substituent.

13 (withdrawn). A compound comprising the formula



wherein

R_3 and R_4 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl,

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aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group or where R_3 and R_4 are taken together to form a ring;

R_5 is selected from a group of substituents that comprise a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_6 is selected from a group of substituents that comprise a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_7 and R_8 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or R_7 and R_8 are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring;

R_{12} and R_{13} are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or R_7 and R_8 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

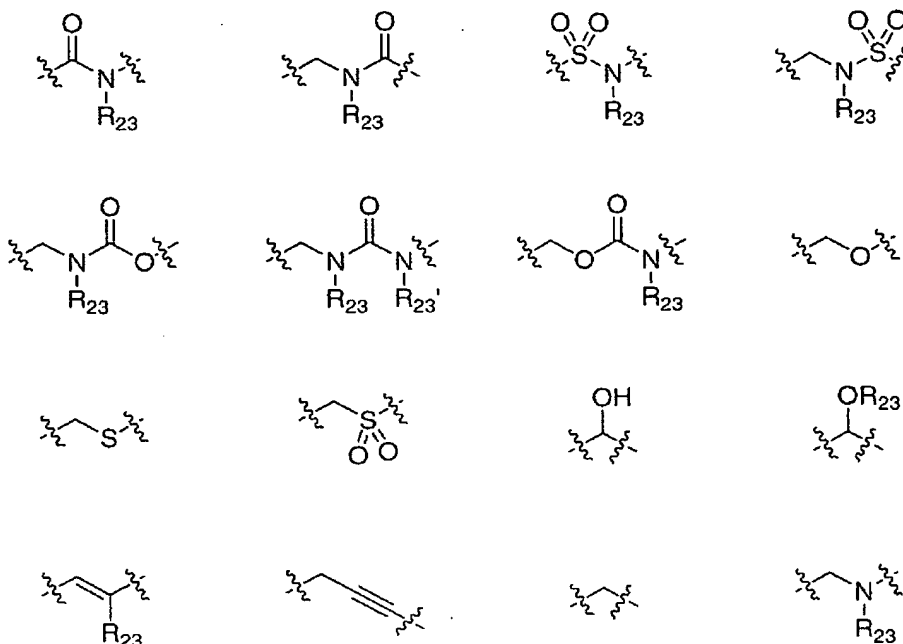
X is selected from the group consisting of O, S, and NR_{14} , where R_{14} comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, hydroxyl, alkyl, aromatic ring, alkoxy, aryloxy, a carbonyl group, a thiocarbonyl group, and a sulfonyl group;

M is a substituent capable of complexing with a protein metal ion;

J is selected from the group consisting of

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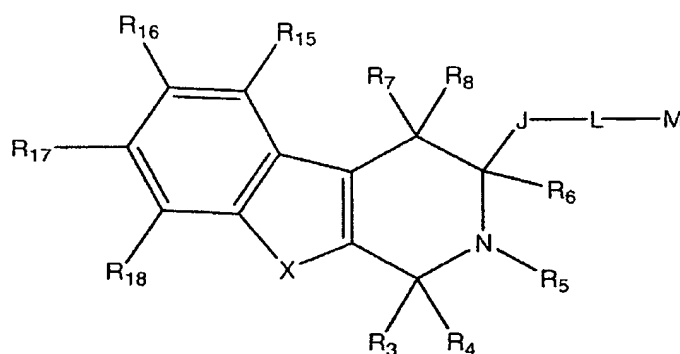
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where R₂₃ is a C₁₋₁₀ alkyl; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the J substituent.

14 (withdrawn). A compound comprising the formula:



wherein

R₃ and R₄ are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl,

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aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group or where R_3 and R_4 are taken together to form a ring;

R_5 is selected from a group of substituents that comprise a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_6 is selected from a group of substituents that comprise a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_7 and R_8 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or R_7 and R_8 are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring;

R_{15} , R_{16} , R_{17} and R_{18} are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, except where R_{15} and R_{16} , R_{16} and R_{17} , and/or R_{17} and R_{18} are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

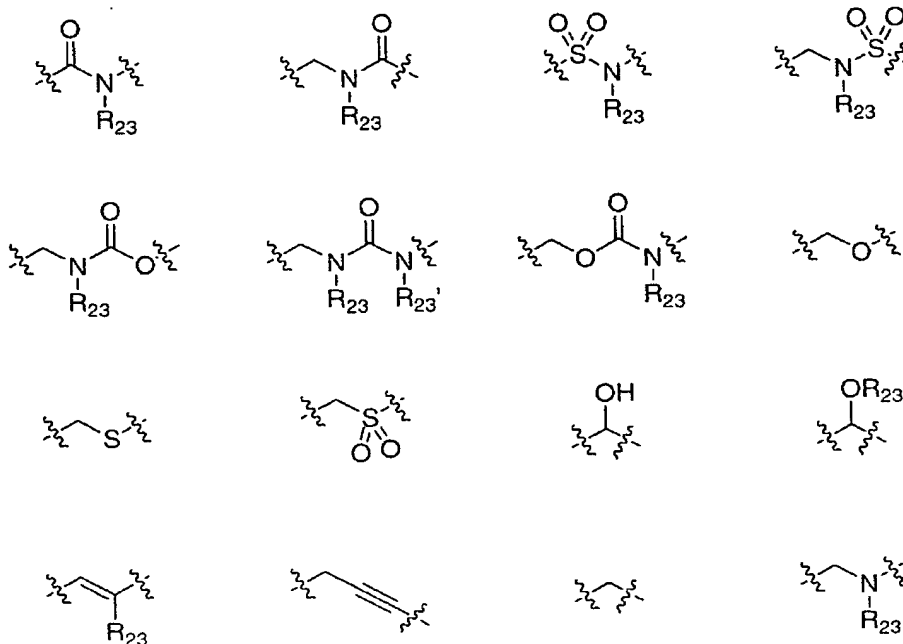
X is selected from the group consisting of O, S, and NR_{14} , where R_{14} comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, hydroxyl, alkyl, aromatic ring, alkoxy, aryloxy, a carbonyl group, a thiocarbonyl group, and a sulfonyl group;

M is a substituent capable of complexing with a protein metal ion;

J is selected from the group consisting of

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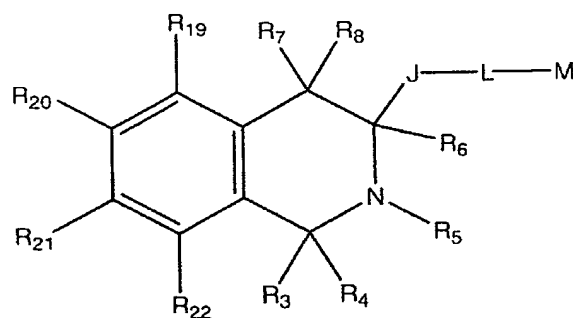
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where R_{23} is a C_{1-10} alkyl; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the J substituent.

15 (withdrawn). A compound comprising the formula:



wherein

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R_3 and R_4 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group or where R_3 and R_4 are taken together to form a ring;

R_5 is selected from a group of substituents that comprise a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_6 is selected from a group of substituents that comprise a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group;

R_7 and R_8 are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or R_7 and R_8 are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring;

R_{19} , R_{20} , R_{21} and R_{22} are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, except where R_{19} and R_{20} , R_{20} and R_{21} , and/or R_{21} and R_{22} are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring;

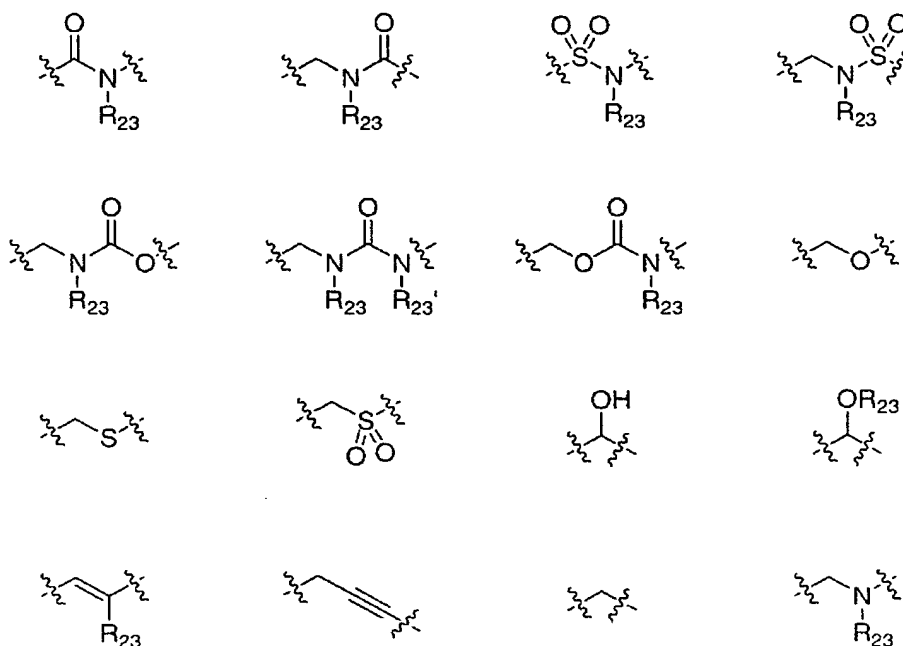
X is selected from the group consisting of O, S, and NR_{14} , where R_{14} comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, hydroxyl, alkyl, aromatic ring, alkoxy, aryloxy, a carbonyl group, a thiocarbonyl group, and a sulfonyl group;

M is a substituent capable of complexing with a protein metal ion;

J is selected from the group consisting of

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where R_{23} is a C_{1-10} alkyl; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the J substituent.

16 (presently amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted C_1 - C_{10} alkyl, aminoalkyl, or oxaalkyl.

17 (presently amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted branched C_1 - C_{10} alkyl, aminoalkyl, or oxaalkyl.

18 (original). A compound according to claim 17, wherein the C_1 - C_{10} alkyl, aminoalkyl, or oxaalkyl further comprises a substituent selected from the group consisting of an alkyl, aromatic ring, cyano group, halogen, and carbonyl group.

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19 (original). A compound according to claim 17, wherein the C₁- C₁₀ alkyl, aminoalkyl, or oxaalkyl further comprises a substituted or unsubstituted aromatic ring.

20 (presently amended). A compound according to claim 10, wherein at least one of R₃ and R₄ is selected from a group of substituents where the moiety attached to the ring carbon is an a substituted or unsubstituted aromatic ring.

21 (presently amended). A compound according to claim 10, wherein at least one of R₃ and R₄ is selected from a group of substituents where ~~where~~ the moiety attached to the ring carbon is a substituted or unsubstituted phenyl ring.

22 (previously amended). A compound according to claim 10, wherein at least one of R₃ and R₄ is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted heteroaryl.

23 (previously amended). A compound according to claim 10, wherein at least one of R₃ and R₄ is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted heteroaryl selected from the group consisting of furan, thiofuran, pyrrole, pyrazole, isoimidazole, triazole, isoxazole, oxazole, thiazole, isothiazole, oxadiazole, oxatriazole, pyridine, pyridazine, pyrimidine, pyrazine, triazine, benzofuran, isobenzofuran, benzothiofuran, isobenzothiofuran, indole, isobenzazole, quinoline, isoquinoline, cinnoline, quinazoline, naphthyridine, and pyridopyridine.

24 (previously amended). A compound according to claim 10, wherein R₃ and R₄ are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

25 (previously amended). A compound according to claim 10, wherein R₃ and R₄ are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 member alicyclic ring.

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26 (presently amended). A compound according to claim 10, wherein at least one of R₃ and R₄ is selected from a group of substituents where the moiety attached to the ring carbon is selected from the group consisting of an aldehyde, amide, ester, ketone, and carboxylic acid, each unsubstituted or further substituted through available valencies.

27 (previously amended). A compound according to claim 10, wherein R₅ and R₆ are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

28 (previously amended). A compound according to claim 10, wherein R₅ and R₆ are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 alicyclic ring.

29 (previously amended). A compound according to claim 10, wherein R₆ and R₇ are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

30 (previously amended). A compound according to claim 10, wherein R₆ and R₇ are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 alicyclic ring.

31 (previously amended). A compound according to claim 10, wherein R₇ and R₈ are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

32 (previously amended). A compound according to claim 10, wherein R₇ and R₈ are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 alicyclic ring.

33 (presently amended). A compound according to claim 10, wherein R₇ and R₈ are taken together to form an imine having a substituent R₉ on the imine nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, and sulfonylamino, each unsubstituted or further substituted through available valencies.

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34 (presently amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form an alkene substituent having the formula $=CR_{10}R_{11}$ where R_{10} and R_{11} are each independently selected from a group of substituents consisting of hydrogen, ~~halogen~~, alkyl, aryl, ~~alkoxy~~, ~~aryloxy~~, alkylamino, arylamino, ~~alkylthio~~, ~~arylthio~~, ~~acylamino~~, sulfonylamino, ~~cyano~~, ~~nitro~~, a carbonyl group, thiocarbonyl, and sulfonyl or where R_{10} and R_{11} are taken together to form an alkene, each unsubstituted or further substituted through available valencies.

35 (presently amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form an alkene substituent having the formula $=CR_{10}R_{11}$ where R_{10} and R_{11} are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, each unsubstituted or further substituted through available valencies.

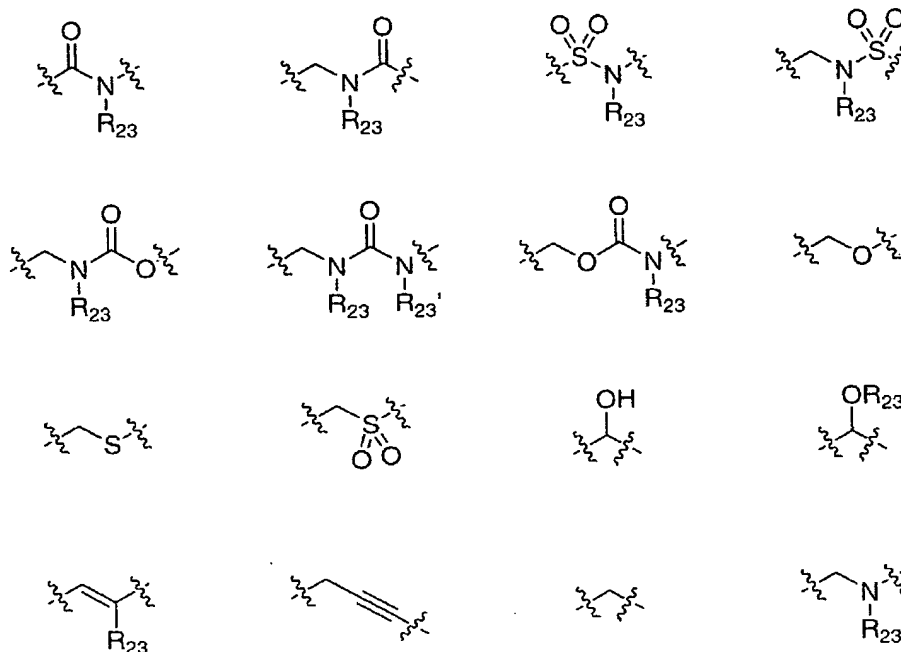
36 (original). A compound according to claim 35 wherein R_{10} and R_{11} are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 member alicyclic ring.

37 (cancelled).

38 (previously presented). A compound according to claim 10, wherein a portion of L that is attached to the ring comprises a moiety selected from the group consisting of:

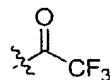
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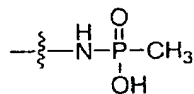


where R₂₃ is a C₁₋₁₀ alkyl.

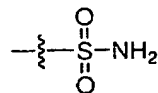
39 (new). A compound according to claim 10, wherein M is



40 (new). A compound according to claim 10, wherein M is



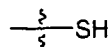
41 (new). A compound according to claim 10, wherein M is



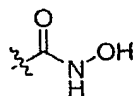
42 (new). A compound according to claim 10, wherein M is

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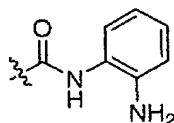
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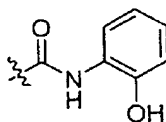
43 (new). A compound according to claim 10, wherein M is



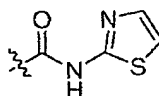
44 (new). A compound according to claim 10, wherein M is



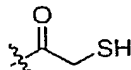
45 (new). A compound according to claim 10, wherein M is



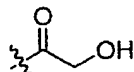
46 (new). A compound according to claim 10, wherein M is



47 (new). A compound according to claim 10, wherein M is



48 (new). A compound according to claim 10, wherein M is



49 (new). A compound according to claim 10, wherein L is substituted or unsubstituted chain of 3-9 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

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50 (new). A compound according to claim 10, wherein L is a substituted or unsubstituted chain of 4-8 atoms connecting the M substituent to the carbon atom alpha to the L substituent.

51 (new). A compound according to claim 10, wherein L is a substituted or unsubstituted alkyl, alkene or alkyne 3-12 atoms in length as measured between the M substituent and the carbon atom alpha to the L substituent.

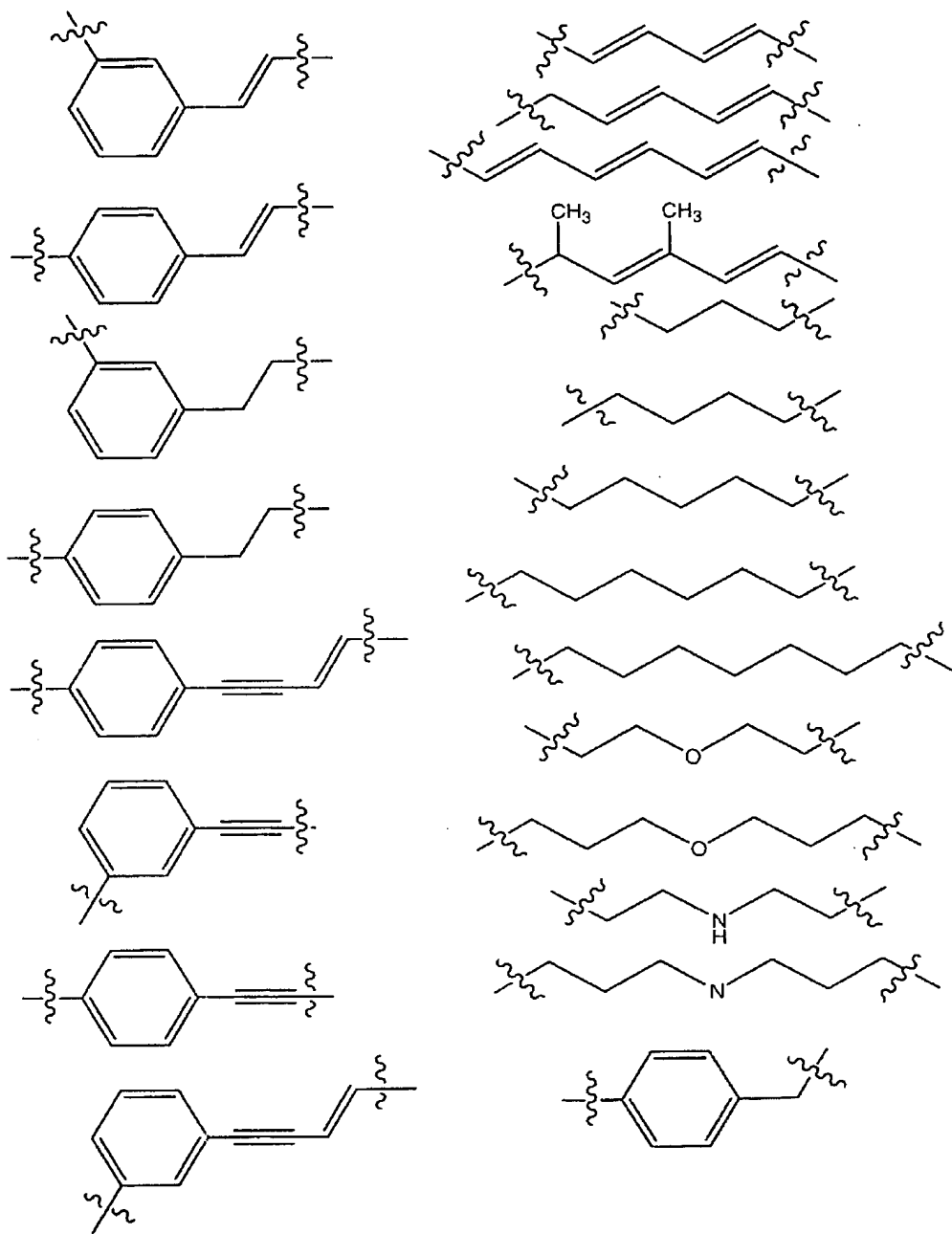
52 (new). A compound according to claim 10, wherein L is a substituted or unsubstituted alkyl, alkene or alkyne 3-9 atoms in length as measured between the M substituent and the carbon atom alpha to the L substituent.

53 (new). A compound according to claim 10, wherein L is a substituted or unsubstituted alkyl, alkene or alkyne 4-8 atoms in length as measured between the M substituent and the carbon atom alpha to the L substituent.

54 (new). A compound according to claim 10, wherein L is selected from the group consisting of

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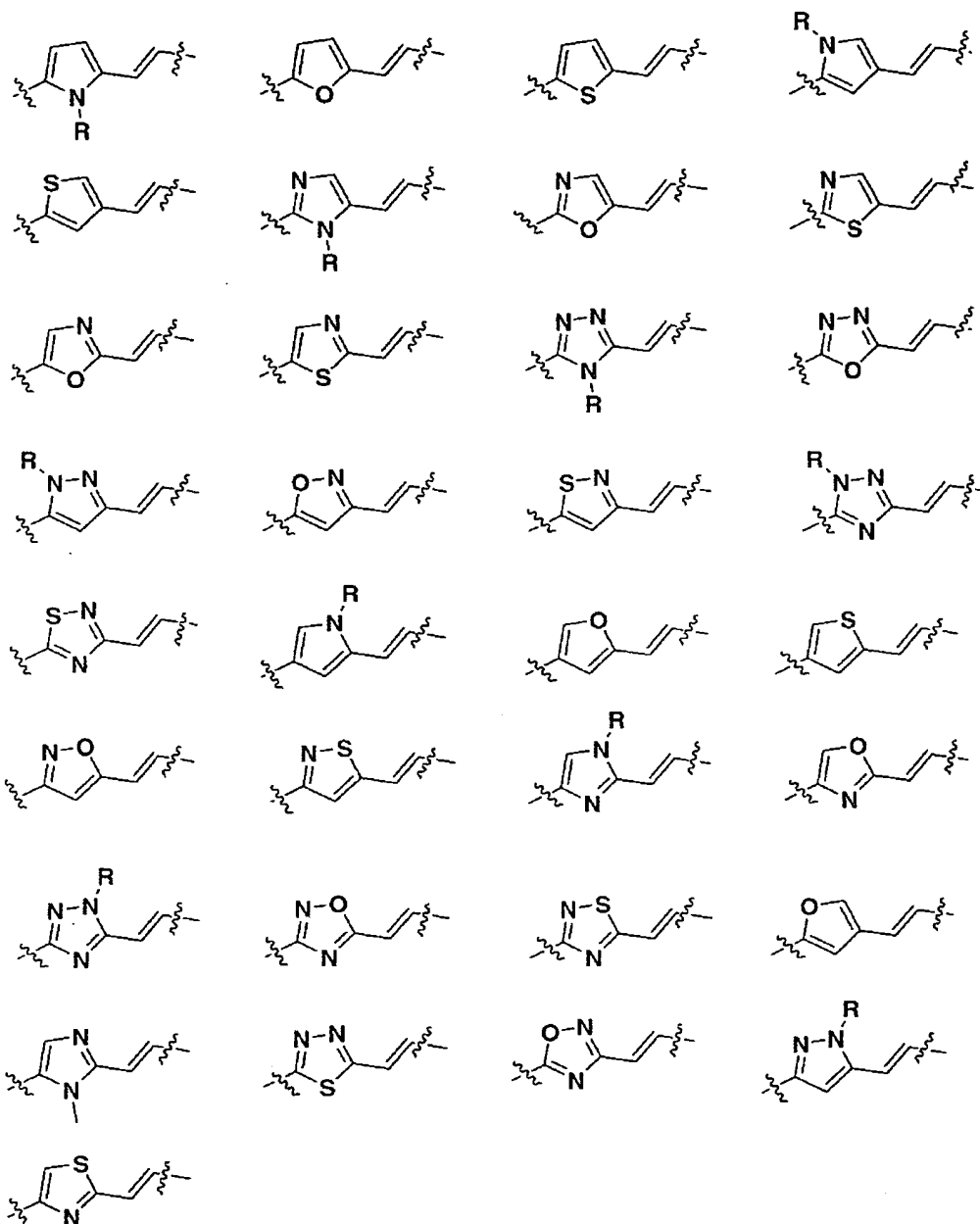
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55 (new). A compound according to claim 10, wherein L is selected from the group consisting of

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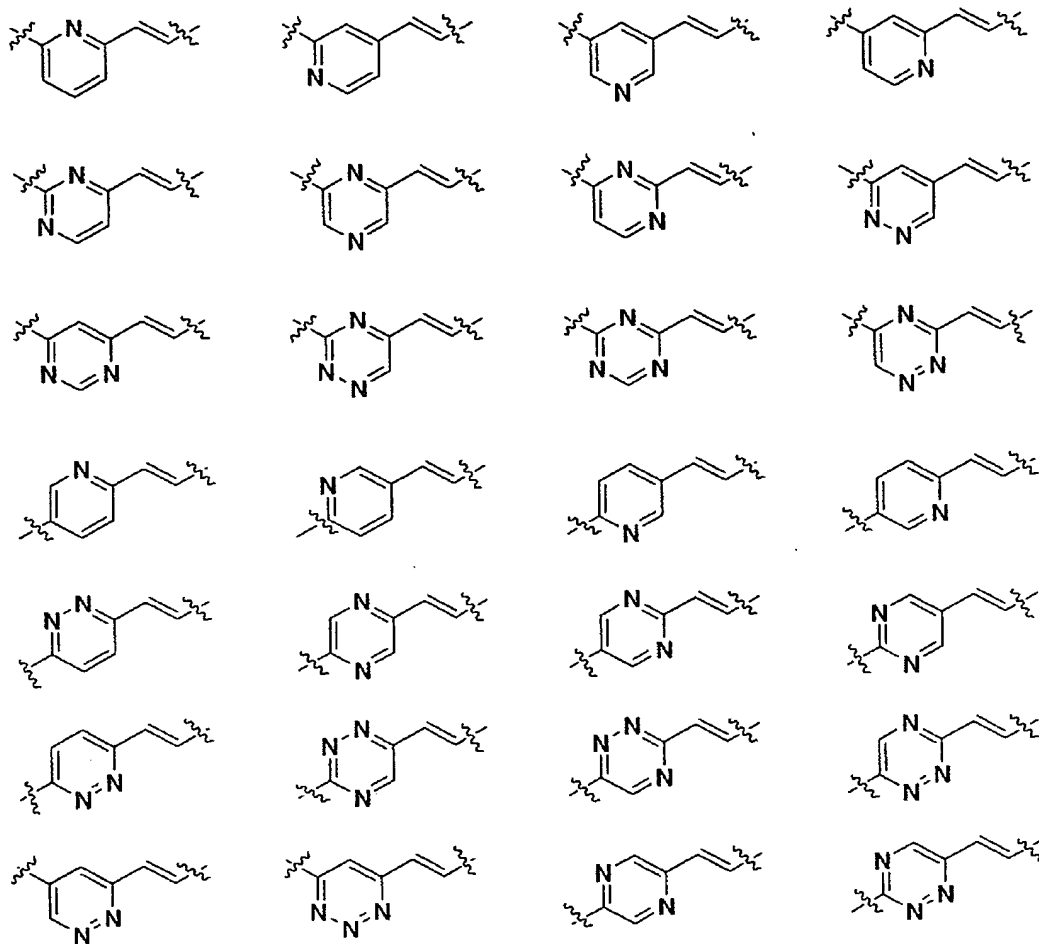
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56 (new). A compound according to claim 10, wherein L is selected from the group consisting of

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57 (new). A compound according to claim 10, wherein one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a three, four, five, six, seven, eight or nine membered ring.

58 (new). A compound according to claim 10, wherein one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of a three, four, five, six, seven, eight or nine membered saturated ring.

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59 (new). A compound according to claim 10, wherein one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of a three, four, five, six, seven, eight or nine membered unsaturated ring.

60 (new). A compound according to claim 10, wherein one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of a three, four, five, six, seven, eight or nine membered aromatic ring.

61 (new). A compound according to claim 10, wherein one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of a ring selected from the group consisting of cyclopropyl, cyclohexane, cyclopentane, cyclopentene, cyclopentadiene, cyclohexene, cyclohexadiene, phenyl, cycloheptane, cycloheptene, cycloheptadiene, cyclooctane, cyclooctene, and cyclooctadiene.

62 (new). A compound according to claim 10, wherein at least a portion of the L substituent comprises a moiety selected from the group consisting of phenyl, biphenyl-2-yl, 2-bromophenyl, 2-bromocarbonylphenyl, 2-bromo-5-fluorophenyl, 4-*tert*-butylphenyl, 4-carbamoylphenyl, 4-carboxy-2-nitrophenyl, 2-chlorophenyl, 4-chlorophenyl, 3-chlorocarbonylphenyl, 4-chlorocarbonylphenyl, 2-chloro-4-fluorophenyl, 2-chloro-6-fluorophenyl, 4-chloro-2-nitrophenyl, 6-chloro-2-nitrophenyl, 2,6-dibromophenyl, 2,3-dichlorophenyl, 2,5-dichlorophenyl, 3,4-dichlorophenyl, 2-difluoromethoxyphenyl, 3,5-dimethylphenyl, 2-ethoxycarbonylphenyl, 2-fluorophenyl, 2-iodophenyl, 4-isopropylphenyl, 2-methoxyphenyl, 4-methoxyphenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, 5-methyl-2-nitrophenyl, 4-methylsulfonylphenyl, naphth-2-yl, 2-nitrophenyl, 3-nitrophenyl, 4-nitrophenyl, 2,3,4,5,6-pentafluorophenyl, phenyl, 2-trifluoromethoxyphenyl, 3-trifluoromethoxyphenyl, 4-trifluoromethoxyphenyl, 2-trifluoromethylphenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 2-trifluoromethylsulfanylphenyl, and 4-trifluoromethylsulfanylphenyl.

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63 (new). A compound according to claim 10, wherein at least a portion of the L substituent comprises a moiety selected from the group consisting of furan, thiofuran, pyrrole, isopyrrole, 3-isopyrrole, pyrazole, isoimidazole, triazole, isoxazole, oxazole, thiazole, isothiazole, oxadiazole, oxatriazole, pyridine, pyridazine, pyrimidine, pyrazine, triazine, benzofuran, isobenzofuran, benzothiofuran, isobenzothiofuran, indole, isobenzazole, quinoline, isoquinoline, cinnoline, quinazoline, naphthyridine, and pyridopyridine.

64 (new). A compound according to claim 10, wherein at least a portion of the L substituent comprises a moiety selected from the group consisting of 4-amino-2-hydroxypyrimidin-5-yl, dibenzofuranyl, benzothiazol-2-yl, 1*H*-benzoimidazol-2-yl, 2-bromopyrid-5-yl, 5-bromopyrid-2-yl, 4-carbamoylthiazol-2-yl, 3-carboxypyrid-4-yl, 5-carboxy-2,6-dimethylpyrid-3-yl, 3,5-dimethylisoxazol-4-yl, 5-ethoxy-2,6-dimethylpyrid-3-yl, 5-fluoro-6-hydroxypyrimidin-4-yl, fur-2-yl, fur-3-yl, 5-hydroxy-4,6-dimethylpyrid-3-yl, 8-hydroxy-5,7-dimethylquinolin-2-yl, 5-hydroxymethylisoxazol-3-yl, 3-hydroxy-6-methylpyrid-2-yl, 3-hydroxypyrid-2-yl, 1*H*-imidazol-2-yl, 1*H*-imidazol-4-yl, 1*H*-indol-3-yl, isothiazol-4-yl, isoxazol-4-yl, 2-methylfur-3-yl, 5-methylfur-2-yl, 1-methyl-1*H*-imidazol-2-yl, 5-methyl-3*H*-imidazol-4-yl, 5-methylisoxazol-3-yl, 5-methyl-2*H*-pyrazol-3-yl, 3-methylpyrid-2-yl, 4-methylpyrid-2-yl, 5-methylpyrid-2-yl, 6-methylpyrid-2-yl, 2-methylpyrid-3-yl, 2-methylthiazol-4-yl, 5-nitropyrid-2-yl, 2*H*-pyrazol-3-yl, 3*H*-pyrazol-4-yl, pyridazin-3-yl, pyrid-2-yl, pyrid-3-yl, pyrid-4-yl, 5-pyrid-3-yl-2*H*-[1,2,4]triazol-3-yl, pyrimidin-4-yl, pyrimidin-5-yl, 1*H*-pyrrol-3-yl, quinolin-2-yl, 1*H*-tetrazol-5-yl, thiazol-2-yl, thiazol-5-yl, thien-2-yl, thien-3-yl, 2*H*-[1,2,4]triazol-3-yl, 3*H*-[1,2,3]triazol-4-yl, 5-trifluoromethylpyrid-2-yl, and the like. Suitable protecting groups include *tert*-butoxycarbonyl, benzyloxycarbonyl, benzyl, 4-methoxybenzyl, and 2-nitrobenzyl.

65 (new). A compound according to claim 10, wherein a portion of the L substituent that is attached to M is meta or para cinnamate.